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09/646,589	09/19/2000	Takeo Morinaga	SONYJP-097	1519

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LERNER, DAVID, LITTENBERG,  
KRUMHOLZ & MENTLIK  
600 SOUTH AVENUE WEST  
WESTFIELD, NJ 07090

EXAMINER
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VU, NGOC K

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 12/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/646,589

**Applicant(s)**

MORINAGA ET AL.

**Examiner**

Ngoc K. Vu

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

***Response to Arguments***

1. Applicant's arguments filed 7/15/2004 with respect to claims 1-6 have been considered but are not persuasive.

Firstly, applicant argues that the plurality of output terminals in Okuyama are not on a single apparatus or device, as is required by claim 1 (see remarks on page 5, second paragraph). Examiner respectfully disagrees.

With respect to claim 1, Okuyama shows a data processing system or apparatus comprising a STB 101 and a plurality of output devices such as TV 110, DVC 111, DVD\_RAM 112 and HDD 113 as illustrated in figure 23. The STB 101 receives the digital multi-channel broadcasting signals, converts the data format into the IEEE 1394 format, and transmits the data to devices 110-113 via the bus 100. One of devices 110-113 receives the channel it desires only from the channels supplied from the STB 101 via the bus 100 (see col. 27, lines 23-28 and figure 23). That is, the receiving devices 110-113 are output terminals for outputting the digital data received from the sending device STB 101. For example, the received digital data is recorded on at least one of the receiving devices DVC 111, DVD\_RAM 112 and HDD 113, while the received digital data is displayed on TV 110. Furthermore, Okuyama discloses that several devices connected in a network are controlled for copy generation control by a single device (see col. 26, lines 36-38). That is, the receiving devices 110-113 connected in a network via bus 100 are controlled by the sending device STB 101. Therefore, the plurality of output terminals 110-113 in Okuyama are on a single network or an apparatus as shown in figure 23.

Secondly, applicant argues that STB 101 is not disclosed as having any means for controlling each of said plurality of output terminals such that said digital data is output from only a specified one of said plurality of output terminals according to said predetermined copy control data (see remarks on page 7, first paragraph). This argument is not persuasive.

As addressed above, Okuyama discloses that several devices, e.g., 110-113, connected in a network are controlled for copy generation control by a single device, e.g., STB 101. The STB 101 uses the isochronous transmission function to transmit the multi-channel broadcasting signals via the bus 100 while receiving the multi-channel broadcasting signals and controls copying by asynchronous communication with the receiving devices (e.g., devices 110-113) using asynchronous transmission function (see col. 26, lines 36-38; col. 27, lines 38-43).

Okuyama further discloses that the STB 101 can detect the copy generation management information (CGMS-D) added to the header of the multi-channel broadcasting signals. If the copy prohibition signal "11" is detected as the copy generation management information of the channel B in the multi-channel broadcasting signal, the circuit 108 of the STB 101 resets the receivable channels to the devices sending the receiving request for channel B. For example, channel A is specified as the receivable channel for the device 111 (DVC), channels A/C/D are specified as the receivable channels for the device 113 (HDD). Based on the copy generation management information, devices 111 and 113 can not receive channel B among the desired channels in the broadcasting signals. If the copy generation management information of channel B in the multi-channel broadcasting signals is "10" or "00", the receivable channels are reset for the device 111 (DVC) or the device 113 (HDD). For example, channels A/B are specified as the receivable channels for the device 111 and channels A/B/C/D are specified as the receivable channels for the device 113. Based on the copy generation management information, the devices 111 and 113 can receive all channels in the broadcasting signals they have requested (see col. 29, lines 11-37; col. 29, line 62 to col. 30, line 3).

Furthermore, Okuyama discloses that copy protection for recording capability device may be also achieved by directly sending the recording permit/prohibition information for every channel to the receiving device by writing to the "Receivable channel specification command" to

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be sent as the asynchronous command from the STB 101. For example, when device 112 (DVD-RAM) sends the asynchronous command requesting receiving of channel C only. If the STB 101 detects the copy prohibition signal "11" as the copy generation management information for channel C, the STB 101 may send an asynchronous command to the device 112 as a recording capability device to specify a number which cannot be a receivable channel number or a number which does not exist as an isochronous data channel in the "Receivable channel specification command" or may send no "Receivable channel specification command" in order to achieve copy protection for the device 112 as the DVD-RAM (see col. 30, lines 11-19 and 39-50).

In addition, according to the specification of the instant application, the digital data, e.g., audio data, supplied to either digital recording apparatus 7 or 8 which is specified by the user. Particularly, the first or the second audio data is transmitted to either the digital output terminal 22 or 24 which is specified by the user (Emphasis added - see page 10, third paragraph to page 11 third paragraph). That is, the digital data is output from a particular output terminal that is specified by the user.

Referring to the teaching of Okuyama, the user selects which receiving device (from 110-113) to output the received digital broadcasting signals. For example, the user wants to see programs on channels A and B on device 110, to record a program on channel C to the device 112, or to record programs on channels A and B to the device 111...etc. The receiving devices send channel request to the STB 101 as an asynchronous command. Upon receipt of receiving channel requests from the receiving devices, the STB 101 specifies the receivable channel among the channels A-D to the receiving devices serving as the origins of the receiving channel requests (see col. 28, lines 7-43).

Thus, the digital broadcasting signal is output from a particular receiving device which is specified by the user and the STB 101 sends the digital broadcasting signal to that particular receiving device as long as the copying of the digital broadcasting signal is permitted. In particular, Okuyama discloses a control means (via STB 101) for controlling each of the plurality of output terminals (e.g., STB 101 controls copying by asynchronous communication with the receiving devices 110-113) such that the digital data is output from only a specified one of the plurality of output terminals (e.g., the digital broadcasting data is output from a particular receiving device which is selected by the user) according to the predetermined copy control data (e.g., the digital broadcasting data is output from that particular receiving device as long as copying of the digital data is permitted based on the copy generation management information CGMS-D from STB 101), with respect to claim 1.

Thirdly, applicant argues that Okuyama does not disclose conveying digital data to a plurality of outputs on an apparatus as recited in claim 4 (see remarks on page 7, third paragraph). This argument is not persuasive.

As addressed above, Okuyama clearly discloses that the STB 101 receives the digital multi-channel broadcasting signals, converts the data format into the IEEE 1394 format, and transmits the data to devices 110-113 via the bus 100. The device from 110-113 receives the channel it desires only from the channels supplied from the STB 101 via the bus 100 (see col. 27, lines 23-28 and figure 23). That is, the receiving devices 110-113 are output terminals for outputting the digital broadcasting data from the sending device STB 101. Furthermore, the receiving devices 110-113 connected in a network (via bus 100) are controlled by the sending device STB 101. Therefore, conveying the digital broadcasting data to the plurality of output terminals 110-113 on a network or an apparatus (as shown in figure 23) is disclosed by Okuyama.

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Fourth, with respect to claim 4, applicant argues that Okuyama does not disclose controlling each of said plurality of outputs such that said digital data is output from only a specified one of said plurality of outputs according to said predetermined copy control data (see remarks on page 7, third paragraph). The response for this argument is similar to the response as addressed with respect to claim 1 above.

Claims 2, 3, 5 and 6 as being anticipated by Okuyama were fully interpreted in the previous Office Action. Therefore, the claims 1-6 are rejected under 35 U.S.C 102 (e) as being anticipated by Okuyama.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Okuyama et al. (US 6,256,390 B1).

Regarding claim 1, Okuyama discloses a data processing apparatus (*as shown in figure 23*), comprising:

a plurality of output terminals (110, 111, 112, 113 – *see figure 23*) for outputting digital data (*the receiving devices 110-113 are the output terminals for outputting the digital broadcast signals received from a sending device STB 101. For example, the received digital data is recorded on at least one of the receiving devices DVC 111, DVD\_RAM 112 and HDD 113, while the received digital data is displayed on TV 110*), said digital data including predetermined copy

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control data (*digital broadcast signals include copy generation management information*

*(CGMS-D) – see col. 11, lines 21-24; col. 26, lines 36-38 and 47-54; col. 27, lines 1-13); and*

*a control means (STB 101 – see figure 23) for controlling each said output terminal such that said digital data is output from only a specified one of said plurality of output terminals*

*according to said predetermined copy control data (the STB 101 controls copying by*

*asynchronous communication with the devices using asynchronous transmission function. The*

*one of receiving devices 110-113 receives the channel or data it desires only from the channels*

*supplies from STB 101 based on the copy generation management information CGMS-D. The*

*STB 101 can detect the copy generation management information CGMS-D added to the*

*header of the multi-channel broadcasting signals. For example, if the copy prohibition signal*

*“11” is detected as the copy generation management information of the channel B in the*

*broadcasting signal, the circuit 108 of the STB 101 resets the receivable channels to the*

*devices, e.g., 111 and 113, sending the receiving request for channel B. In addition to the above*

*feature, copy protection for recording capability device may be also achieved by directly sending*

*the recording permit/prohibition information for every channel to the receiving device by writing*

*to the “Receivable channel specification command” to be sent as the asynchronous command*

*from the STB 101. It is important to note that the user selects which receiving device to output*

*the received digital broadcast signal. For example, the user wants to see programs on channels*

*A and B on device 110, to record a program on channel C to the device 112, or to record*

*programs on channels A and B to the device 111...etc. The receiving device sends channel*

*request to the STB 101 as an asynchronous command. Upon receipt of receiving channel*

*requests from the receiving device, the STB 101 specifies the receivable channel among the*

*channels A-D to the receiving device serving as the origins of the receiving channel requests.*

*Thus, the digital data is output from a particular receiving device specified by the user and*



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*based on the copy generation management information CGMS-D. That is, the STB 101 controls each of the plurality of output terminals 110-113 such that the digital data is outputted from only a particular receiving device, which is specified by the user, as long as the copying of the digital broadcasting signal is permitted according to the copy generation management information CGMS-D - see col. 28, lines 7-43; col. 29-30, lines 62-10; col. 29, lines 11-37; col. 30, lines 39-50; col. 27, lines 38-43).*

Regarding claim 2, Okuyama discloses that *the circuit 108 of STB 101 adds the converted IEEE 1394 format of copy generation management information CGMS-D to the digital data to be outputted from the particular receiving device specified by the user (see col. 27, lines 4-13 and 23-31 and col. 28, lines 7-20 and figure 23).*

Regarding claim 3, Okuyama discloses that *the copy generation management information indicates whether the digital data can be copied. For example, the copy generation management information "11" indicates copy prohibition or "00" indicates "00" free copying or "10" indicates copying only once (see col. 25, lines 44-49 and 64-67; col. 29, lines 22-37; col. 29-30, lines 62-37; col. 30, lines 39-50).*

Regarding claim 4, Okuyama discloses a data processing method, comprising:  
conveying digital data to a plurality of outputs on an apparatus *(transmitting digital broadcast signals to a plurality of output devices 110-113 from STB 101 via bus 100 on a network or an apparatus as illustrated in figure 23 – see figure 23);*

adding predetermined copy control data to said digital data *(the converted IEEE 1394 format of copy generation management information CGMS-D added to the digital data - see col. 27, lines 4-13 and 23-31);* and

controlling each of said plurality of outputs such that said digital data is output from only a specified one of said plurality of outputs according to said predetermined copy control data

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*(the STB 101 controls copying by asynchronous communication with the devices using asynchronous transmission function. The one of receiving devices 110-113 receives the channel or data it desires only from the channels supplies from STB 101 based on the copy generation management information CGMS-D. The STB 101 can detect the copy generation management information CGMS-D added to the header of the multi-channel broadcasting signals. For example, if the copy prohibition signal "11" is detected as the copy generation management information of the channel B in the broadcasting signal, the circuit 108 of the STB 101 resets the receivable channels to the devices, e.g., 111 and 113, sending the receiving request for channel B. In addition to the above feature, copy protection for recording capability device may be also achieved by directly sending the recording permit/prohibition information for every channel to the receiving device by writing to the "Receivable channel specification command" to be sent as the asynchronous command from the STB 101. It is important to note that the user selects which receiving device to output the received digital broadcast signal. For example, the user wants to see programs on channels A and B on device 110, to record a program on channel C to the device 112, or to record programs on channels A and B to the device 111...etc. The receiving device sends channel request to the STB 101 as an asynchronous command. Upon receipt of receiving channel requests from the receiving device, the STB 101 specifies the receivable channel among the channels A-D to the receiving device serving as the origins of the receiving channel requests. Thus, the digital data is output from a particular receiving device specified by the user and based on the copy generation management information CGMS-D. That is, the STB 101 controls each of the plurality of output terminals 110-113 such that the digital data is outputted from only a particular receiving device, which is specified by the user, as long as the copying of the digital broadcasting signal is permitted*

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*according to the copy generation management information CGMS-D - see col. 28, lines 7-43; col. 29-30, lines 62-10; col. 29, lines 11-37; col. 30, lines 39-50; col. 27, lines 38-43).*

Regarding claim 5, Okuyama further discloses that *the circuit 108 of STB 101 adds the converted IEEE 1394 format of copy generation management information CGMS-D to the digital data to be outputted from the particular receiving device specified by the user (see col. 27, lines 4-13 and 23-31 and col. 28, lines 7-20 and figure 23).*

Regarding claim 6, Okuyama discloses that *the copy generation management information indicates whether the digital data can be copied. For example, the copy generation management information "11" indicates copy prohibition or "00" indicates "00" free copying or "10" indicates copying only once (see col. 25, lines 44-49 and 64-67; col. 29, lines 22-37; col. 29-30, lines 62-37; col. 30, lines 39-50).*

### **Conclusion**

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ngoc K. Vu whose telephone number is 703-306-5976. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on 703-305-4380. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ngoc K. Vu  
Examiner  
Art Unit 2611

December 13, 2004